

## **ATTACHMENT A REQUIREMENTS FOR MONITORING WELL INSTALLATION REPORTS**

Upon installation of the monitoring wells, the Discharger shall submit a well installation report that includes the information listed below. In addition, the report must also clearly identify, describe, and justify any deviations from the approved workplan. All reports must be prepared under the direction of, and signed by, a registered geologist or civil engineer licensed by the State of California.

**A. General Information:**

Purpose of the well installation project

Brief description of local geologic and hydrogeologic conditions encountered during installation of the wells

Number of monitoring wells installed and copies of County Well Construction Permits

Topographic map showing facility location, roads, surface water bodies

Scaled site map showing all previously existing wells, newly installed wells, surface water bodies, buildings, waste handling facilities, utilities, and other major physical and man-made features.

**B. Drilling Details (in narrative and/or graphic form):**

On-site supervision of drilling and well installation activities

Drilling contractor and driller's name

Description of drilling equipment and techniques

Equipment decontamination procedures

Soil sampling intervals and logging methods

Well boring log:

- Well boring number and date drilled
- Borehole diameter and total depth
- Total depth of open hole (same as total depth drilled if no caving or back-grouting occurs)
- Depth to first encountered groundwater and stabilized groundwater depth
- Detailed description of soils encountered, using the Unified Soil Classification System

**C. Well Construction Details (in narrative and/or graphic form):**

Well construction diagram, including:

- Monitoring well number and date constructed
- Casing and screen material, diameter, and centralizer spacing (if needed)
- Length of well casing, and length and position of perforated interval
- Thickness, position and composition of surface seal, sanitary seal, and sand pack
- Type of well caps (bottom cap either screw on or secured with stainless steel screws)

**E. Well Development:**

Date(s) and method of development

How well development completion was determined

Volume of water purged from well and method of development water disposal  
Field notes from well development should be included in report

- F. Well Survey (survey the top rim of the well casing with the cap removed):
- Identify the coordinate system and datum for survey measurements
  - Describe the measuring points (i.e. ground surface, top of casing, etc.)
  - Present the well survey report data in a table
  - Include the Registered Engineer or Licensed Surveyor's report and field notes in appendix